DTN ATTACHMENT

Destroy the superseded DCN that is listed on in the DCN comment column (right hand column). Place the attached DCN's in front the appropriate procedure in your manuals. Destroy the old revison of Table of Contents when replacing with the attached TOC's.

EMD Operating Procedures Volume I - Field Operations

DCN #	DCN Title	DCN Comment
FO.03 92.02	Replace triple rinse with double rinse	Withdraw expired/Superseded by DCN 5-21000-OPS-FO.03 91.01
FO.05 92.01	Clarify protected area	Withdraw expired/Superseded by DCN 5-21000-OPS-FO.05 91.01
FO.06 92.02	Clarify protected area	Withdraw expired/Superseded by DCN 5-21000-OPS-FO.06 91.02
FO.07 92.01	Clarify definition of potentially contaminated	Withdraw expired/Superseded by DCN 5-21000-OPS-FO.07 91.01
FO.07 92.02	Clarify work area characteristics	Withdraw expired/Superseded by DCN 5-21000-OPS-FO.07 91.02
FO.08 92.01	Clarify spraying requirement	Withdraw expired/Superseded by DCN 5-21000-OPS-FO.08 91.03
FO.08 92.02	Clarify protected area	Withdraw expired/Superseded by DCN 5-21000-OPS-FO.08 91.02
FO.10 92.01	Clarify environmental liquids generated	Withdraw expired/Superseded by DCN 5-21000-OPS-FO.10 91.02
FO.16 92.01	Change in monitoring requirements for bedrock work	New DCN

Page 1

January 21, 1992

Date.

A-SW-000231

ADMIN RECORD

EMD Operating Procedures Manual Volume III - Geotechnical

DCN #	DCN Title	DCN Comment
GT.02 92.01	Clarify unconsolidated core sample requirements	Withdraw expired/Superseded by DCN 5-21000-OPS-GT.02 91.01
GT.03 92.01	Grout procedure clarification	Withdraw expired/Superseded by DCN 5-21000-OPS-GT.03 91.02
GT.04 92.01	Clarification of measuring tape decontamination requirements	Withdraw expired/Superseded by DCN 5-21000-OPS-GT.04 91.02
GT.04 92.02	Clarification of core barrel decontamination	Withdraw expired/Superseded by DCN 5-21000-OPS-GT.04 91.01
GT.05 92.01	Surface casing clarification	Withdraw expired/Superseded by DCN 5-21000-OPS-GT.05 91.01
GT.06 92.01	Change in penetration depth into bedrock	Withdraw expired/Superseded by DCN 5-21000-OPS-GT.06 91.01
GT.06 92.02	Specification of auger size	Withdraw expired/Superseded by DCN 5-21000-OPS-GT.06 91.02
GT.11 92.01	Clarification of handling of contaminated/decontaminated surface pad materials	New DCN
GT.15 92.01	Clarification of hole logging requirements	Withdraw expired/Superseded by DCN 5-21000-OPS-GT.15 91.01

Manual No.: Procedure No.:

Page:

5-21000-OPS-FO Table of Contents, Rev 8

1 of 3

Effective Date: Organization:

1/20/92 **Environmental Management**

THIS IS ONE VOLUME OF A SIX VOLUME SET WHICH INCLUDES:

VOLUME I: FIELD OPERATIONS (FO) VOLUME II: GROUNDWATER (GW) VOLUME III: GEOTECHNICALCIGTALTO VOLUME IV: SURFACE WATER (SW) VOLUME V: ECOLOGY (EE) VOLUME VI: AIR (AP)

TABLE OF CONTENTS FOR VOLUME I: FIELD OPERATIONS

Procedure No.	Title	Rev. <u>No.</u>	Effective <u>Date</u>
FO.01	Air Monitoring and Dust Control	1	08/30/91
FO.02	Transmittal of Field QA Records	2	09/23/91
FO.03	General Equipment Decontamination	1	08/30/91
DCN 91.01	Superseded by DCN 92.02	1	01/20/92
DCN 92.01	Clarification of rinsing requirements	1	01/17/92
DCN 92.02	Replace triple rinse with double rinse	1	01/20/92
FO.04	Heavy Equipment Decontamination	1	08/30/91
FO.05	Handling of Purge and Development Water	1	08/30/91
DCN 91.01	Superseded by DCN 92.01	1	01/20/92
DCN 92.01	Clarify portected area	1	01/20/92
FO.06	Handling of Personal Protective Equipment	1	08/30/91
DCN 91.01	Approved practices for disposal of surface water monitoring PPE	1	09/19/91

Manual No.: Procedure No.: 5-21000-OPS-FO Table of Contents, Rev 8

Page: Effective Date: 2 of 3 1/20/92

Organization:

Environmental Management

Procedure <u>No.</u>	<u>Title</u>	Rev. No.	Effective <u>Date</u>
DCN 91.02	Superseded by DCN 92.02	1	01/20/92
DCN 91.04	Clarification of personal protective equipment surveyng	1	11/26/91
DCN 92.01	Change in PPE disposal requirements	1	01/17/92
DCN 92.02	Clarified protected area	1	01/20/92
FO.07	Handling of Decontamination Water and Wash Water	1	08/30/91
DCN 91.01	Superseded by DCN 92.01	1 .	01/20/92
DCN 91.02	Superseded by DCN 92.02	1	01/20/92
DCN 92.01	Clarify definition of potentially contaminated	1	01/20/92
DCN 92.02	Clarify work area characteristics	1	01/20/92
FO.08	Handling of Drilling Fluids and Cuttings	1	08/30/91
DCN 91.01	Delete locking requirement from drum sealing	1	08/30/91
DCN 91.02	Superseded by DCN 92.02	1	01/20/92
DCN 91.03	Superseded by DCN 92.01	1	01/20/92
DCN 92.01	Clarifing spraying requirements	1	01/20/92
DCN 92.02	Clarified protected area	1	01/20/92
FO.09	Handling of Residual Samples	1	08/30/91
FO.10	Receiving, Labeling, and Handling Environmental Materials Containers	1	08/30/91
DCN 91.01	Delete use of indelible markers	1	09/26/91
DCN 91.02	Superseded by DCN 92.01	1	01/20/92

Manual No.: Procedure No.: Page: 5-21000-OPS-FO Table of Contents. Rev 8

dute No.. Table of C

3 of 3 1'20/92

Effective Date:

Organization: Environmental Management

Procedure <u>No.</u>	Title	Rev. <u>No.</u>	Effective <u>Date</u>
DCN 92.01	Clarify environmental liquids generated	1	01/20/92
FO.11	Field Communications	1	08/30/91
FO.12	Decontamination Facility Operations	1	08/30/91
FO.13	Containerization, Preserving, Handling and Shipping of Soil and Water Samples	1	08/30/91
FO.14	Field Data Management	1	08/30/91
DCN 92.01	Expansion of sample analysis requirements	1	01/06/92 :
FO.15	Photoionization Detectors (PIDs) and Flame Ionization Detectors (FIDs)	1	08/30/91
FO.16	Field Radiological Measurements	1	08/30/91
DCN 92.01	Change in monitoring requirements for bedrock work	1	01/20/92
FO.17	Determining Out-Of-Specification Analytical Results for Environmental Samples		To Be Added
FO.18	Environmental Sample Radioactivity Content Screening	1	08/30/91
FO.19	Base Laboratory Work	1	08/30/91

Procedure Number 5-21000-OPS-FO.3. Rev. 1

Title General	Equipm	ent Decontam				2 8-91) 1-1 <i>5-</i> 92		DCN Number 5-21000-OPS- F0-3 92.02		
Expires _	14-30	none	17/72 P	ocedure Revi	sion Required		Yes No			
						· · · · · · · · · · · · · · · · · · ·		1 /3 dr F		
item Number	Page	Step or Paragraph		(Use DC	N CONTINUA		nges SHEET for Add	litional Spac	e)	
1	9 of 18	5.3.1 step 4.	Replace triple	e rinse with do	uble rinse.				- -	
									ŧ	
								÷		
								,		
	·	_	e - Provide Nu al of three rins				ing items Above)		
				 -						
Concur	rence	Organizat	ion Req	Date	Concurren		Organization	Req	Date	
of the	and a	- QAPM	×	1/20/9 L	A 1- Prim	·ou	User.	× _	1/15/40	
MCA	hudark	Eom	×	1/15/92	CB4	7. 3	USER	×	1/1692	
				 	6-A. 1/1		US-5R	3	1/14/92	
Approved Coll Foreign	Pair	ngible Manag	er Date/	7/12	Is Posting Re		If Yes, By What /-30-4		Date Posted	

HANDL	ING OF	PURGE AND DE	EVELOPMENT	WATER	Date	1/25/92	5-21000-OF	S-FA OF LA
xpires cope Lim	upon T	none	Pro 1/20/5 2	cedure Revisio	n Required [Yes No		j. š
tem Number	Page	Step or Paragraph		(Use DCN	Cha I CONTINUATION	nges SHEET for Add	tional Space)
1	Sof8	6.0 Bullets para. 2	Change: To:	"Surface v have not "Protected	vater and sedi been verified Area"	ment samplin as backgrou	g station nd locati	s that ons"
								:
·								
These	change taminat	es are requir	ed to min	imize the p	nce Comespondin otential for aste generate	inadvertant (
Concur	rence	Organization	Req	Date	Сопсителся	Organization	Req	Date
Cancur M.C.E	ence	Organization OAPM EoM	Req X	0ate /10/92	Concurrence	Organization USER_	Req	Date

īlle						···	Date		DCN Numb	er
	oi Perso	onal Protective	e Equipme	ent					5-21000-08	
pires (Journal	poration 4/	9/12	Pro	cedure Revis	ion Required		Yes No		
ope Lin	nitation .	none	····	<u>. </u>				· v.		
em umber	Page	Step or Paragraph			(Lise OC	ON CONTINU		nges SHEET for Add	itional Space	
	4 at 10	6.0 Bullets	Add: "Protected Area (PA) Delete: "Surface Water and Sediment sampling stations that have not been venified as background locations.							
										:
					• .				 .	
į				•				i	:	
stificatio	n (Reasc	n for Change	- Provide	Num	bers To Refe	rence Corresp	condine	g items Above)		
e chang	je is recu	ired to bring th	ne revised	SOP	back to curre	ntly approved	practk	ces.		
Concurr	ence	Organizati	ion P	leq	Oate	Concurren	ce	Organization	Req	Date
ltor	16	QAPM G		X	1/20/92	Antil	H	User	X	1/17/
u e ba	usad	EOM	y	,	1/20/92	7,0	-			
oprgval d	of Plesboo	hable Manage	er D	aje	2	Is Posting R		If Yes, By What		Date Pos

Procedure Number	5-21000-OPS-FO.7	Rev 1

itie		ontamination	Water and	Wasi		Date (10-17	-91) 1-15-92	DCN Num 5-21000-0	ps. 60.	7		
	pon Inc	orporation-4				on Required	X	Yes No				
tem		Step or					Chan	ges	ditional Spa	oca)		
Number	Page 7 of 8	Paragraph 6.1.2 paragraph 1	and vehi	(Use DCN CONTINUATION SHEET for Additional Space) Change the first sentence to read "Wash water used to clean equipment, personnel and vehicles during surface soil sampting, groundwater sampting, and grout mixing equipment used during post drilling activities in work areas characterized as not extentially contaminated								
										:		
								٠.	,	,		
The arrow	t is come	son for Chang posed of bent out plant so th	onite. A Na	tural s	substance , m	ixed with RF				naterials an	Э	
Concu	rrence ,	Organiza	tion	Req	Date _{/4} 1	Concurre	nce	Organizatio	on Rec	Da	te	
te	1/2	QAPA	A	X	1/20/92		man	User	×	1/15	/9	
M.C.	noussau	Eor	7	×	1/15/92	C BQ	1	USER 1°	χ		-/- -/-	
Approve	rof Rest	pensible Mana	det	Date /	7/42	Is Posting I	Read?	If Yes, By Wi	nat Date?	Date P	ost	

Procedure	Number	5-21000-OPS	5- F0.7	_				į	Page 1 of 1
Tale HAND	LING O	F DECONTAM	TAN NOITAN	TER AND WAS	H WATER	Date 1/25/	92.	OCN Number 5-21009-OP	S. FO. 07
Expires		Colopicatio n	/20/20/20 One	ocedure Revis	ion Required	. 🗖 ץ			
Item Number	Page	Step or Paragraph		(Use OC	CN CONTINU	Change ATION SH	s EET for Addi	tional Space	
1	5 of 8	6.0 4th bullet	Delete th	ne fourth b	oullet.	"Surfaçe	water	16	
				·	-				: ,
-								٠.	
	·				÷		1	:	·
		on for Change is required				•		actices.	
Concurr	ence	Organizatio	on Req	Date	Concurrer	nce	Organization	Req	Date
the	de	QAPM	X	1/20/92	Anost !!	WHI.	USER	X	1/17/92
M.C. Bra	user	EOM	×		70	,			
Approval of		igible Manage	r Date	7/92	Is Posting R	eqd? II.Y	es, By What	Oste? (1/25/42)	Date Posted

Procedure Number 5-21000-OPS-FO.8, Rev. 1

Tille Handlin	of Drilli	ng Fluida and	Cuttings	<u> </u>	i		Date (10:28-91)	1.	DCN Numb 5-21000-0	er PS- Fa.5 az.al
Expires	4-7	472 4/1	4/92	Pn 1/2 c		sion Required	X Yes	□ Na	MENT	-
item Number	Page	Step or Paragraph			(Use DC	ON CONTINUA	Changes TION SHEE	T for Addit	ional Spac	e)
1	8 of 12	6.2 paragraph 1	operatio	ns, a	atings will be	nce with: "If sign wetted with dis Cuttings that a	tilled water	from a han	d-pressuri;	
,					-		:			
	•	_				lerence Corres	•	·	ı a problem	.
Concur	auce	Organizatio	on F	geq.	Date	Concurrence	e Org	anization	Req	Date
Sto	Voll.	QAPM		X	1/10/92	91 Pino		User	X	1/15/92
MC Bu	chrose	EOM		X	1/15/92	(80 pg			×	115/92
						GA. Sil	6	<u>д</u>	X	H15/92
Approval	of Bespo	nsible Manage	ar 0	219	152	ls Posting Red		By What C		Date Posted

Page 1 of 1

Procedure Number 5-21000-OPS- F0.3

itle HANI	DLING O	F DRILLING	FLUIDS AND	CUTTINGS	. Da	1/25/92	DCN Numb 5-21000-O			
pires ope Lin	lipeo-T	1/19/14 L	Pro		sion Required	X Yes No	£ 3	#*** # **		
nwper sw	Page	Slep or Paragraph	Changes (Use DCN CONTINUATION SHEET for Additional Space)							
1	6 of 1	6.0 para	Change b	1	Surface water that have not locations" 'Protected Are	and sediment s been verified	sampling s as backgr	tations ound		
								:		
						:	:.			
These conta progr	change minated ams.	s are requi	red to min to minimiz	imize the e solid w	aste generated	r inadvertant i by the surfa	ce-water n	onitorin		
Concur		Organizatio	n Req	Date	Concurrence	Organization	n Req	Date		
lest 1 Ch	cusad	QAPM FOM	, X	1/20/92	Anogel Hote	USER	X	1/17/9		
										
provale	of Respon	sible Manager	Date	2/91	Is Posting Read	? If Yes, By Wha		Date Post		

Procedure Number	5-21000-OPS- F0 . 10
	•

Title REC	EIYING, ERIALS	LABELING.	AND HANDLI	NG ENVIRO	NMENTAL O	ale 1/25/9 2	<u> </u>	er PS-F0.10 92.01		
Expires Scope Lim		earpuration 4/11/12/2 none	/ Pro/1		sion Required	Yes No				
Item Number	Page	Slep or Paragraph	Changes (Úse DCN CONTINUATION SHEET for Additional Space)							
1	12 of 20	7.2.1	Change: "Environemtal liquids generated within the followareas will be characterized as potentially contaminated: . Surface water and sediment sampling stations have not been verified as background location. Work areas where drilling activities are being conducted To: "Environmental liquids generated within work are drilling activities are being conducted will be characterized as potentially contaminated."							
2	15 of 20	7.2.1 second to last para.	Change: To:							
Th	ese cha ntamina manage	inges are re	quired in ontaminate e associat	order to i	minimize the	nding Items Above) potential for ze the amount of ater monitoring Organization	inadverta of effort programs	required		
/	VA .				·	. 1				
M.C.B.	cuosas	QAPM EOM	×	1/20/02	Applicate		X	1/17/92		
Approval c	of Respor	rsible Manager	Date	la:	Is Posting Reco	d? If Yes, By Wha	t Date?	Date Posted		

Procedure Number 5-21000-OPS-FO.16, Rev. 1

Title Field Ba	adiologica	ıl Measureme	nts		No.		Date 1/14/9	2	DCN Numb 5-21000-06	S- FO.14
Expires	_	182 N		/Zno	cedure Revis	ion Require	i IX	Yes 🗌 No		92.01/
Scope Lin	nitation	Areas free of	chemical a	and ra	idiological co	neitenimeth			1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	<u></u>
item Number	Page	Step or Paragraph		Changes (Use DCN CONTINUATION SHEET for Additional Space)						
1	14 of 16	6.3.2.3 3rd paragraph	Identified	Change 1st sentence to: "Core intervals in known IHSSs, the Americium Zone, dentified Groundwater Plume areas and in areas where surface contamination has been detected will be monitored and the results recorded."						
2	14 of 16	6.3.2.3	Add the following final paragraphs (make new section in next revision): "The following requirements will apply during bedrock drilling after isolating alluvium from bedrock at sites in non-IHSS areas when all these conditions apply: there has been no historical contamination surface contamination was not detected during the pre-work site survey no contamination was detected in the alluvium. Once the alluvium has been isolated from the bedrock as per SOP GT.3, Isolating Bedrock from Alluvium with Grouted Surface Casing, the exclusion zone will be kept for safety and site control purposes only. Egress from the area will be allowed without decontamination and radiological screening of personnel or equipment. Swipe sampling will be performed on the interior of each core barrel and the results will be used to properly handle these materials. In the case of a field detection, core or cuttings will be handled as per sections 6.3.2.2.1 and 6.3.2.3. Spot checks of downhole geophysical equipment will also be conducted as a control measure. Periodic screens of personnel will be conducted during the day and an end-of-day personnel frisk will be performed to insure that if any contamination is present, it does not leave the site via workers."							
Bedrock o	drilling in I	historically un	contamina	ated a	reas where t	he alluvium l	has beer	ng items Above n isolated from ng requirement	the bedrock	with surface
Concur	rence	Organizati	on A	eq	Date	Солсите	nce	Organization	Req	Date
Str-	The said	QAPM		X	20/9L	at P	med2	User	X	1/17/92
MCBu	MC Browsand EOM			X	1/20/02	D. m /L	-2	User	×	47/92
						·				
Approval	of Respon	nsible Manag	er D	ate 20	192	Is Posting F	Read?	Yes, By Wha	t Date?	Date Posted

Manual No.: Procedure No.: Page: 5-21000-OPS-GT Table of Contents, Rev 14

1 of 4

Effective Date:

01/20/92

Organization: Environmental Management

THIS IS ONE VOLUME OF A SIX VOLUME SET WHICH INCLUDES:

VOLUME I: FIELD OPERATIONS (FO)
VOLUME II: GROUNDWATER (GW)
VOLUME III: GEOTECHNICAL (GT)
VOLUME IV: SURFACE WATER (SW)
VOLUME V: ECOLOGY (EE)
VOLUME VI: AIR (AP)

TABLE OF CONTENTS FOR VOLUME III: GEOTECHNICAL

Procedure <u>No.</u>	<u>Title</u>	Rev. No.	Effective Date
GT.01	Logging Alluvial and Bedrock Material	1	08/30/91
DCN 91.01	Recording lithologic descriptions and securing core boxes	1	11/15/91
DCN 91.02	Clarification of log approval for multi-use wells	1	12/03/91
GT.02	Drilling and Sampling Using Hollow Stem Auger Techniques	1 .	08/30/91
DCN 91.01	Superseded by DCN 92.01	1	01/20/92
DCN 91.02	Correction of well location for low Alluvial thickness	1 .	11/06/91
DCN 91.03	Ten foot long core barrels	1	11/15/91
DCN 92.01	Clarify unconsolidated core sample requirements	1	01/20/92
GT.03	Isolating Bedrock from Alluvium with Grouted Surface Casing	1	08/30/91
DCN 91.01	Superseded by DCN 91.03	1	12/12/91
DCN 91.02	Superseded by DCN 92.01	1 .	01/20/92

Manual No.: Procedure No.: 5-21000-OPS-GT

Table of Contents, Rev 14 Page:

2 of 4

Effective Date:

01/20/92

Environmental Management Organization:

Title	Rev. <u>No.</u>	Effective <u>Date</u>
Change in criteria for cement grouting	1	12/12/91
Grout procedure clarification	1 .	01/20/92
Depth of casing emplacement	1	12/17/91
Addition of Grout Ports	1	12/19/91
Rotary Drilling and Rock Coring	1	08/30/91
Superseded by DCN 92.02	1	01/20/92
Superseded by DCN 92.01	1	01/20/92
Superseded by DCN 91.04	1	12/17/91
Clarification of the use of super gel-x	1	12/17/91
Clarification of measuring tape decontamination requirements	1	01/20/92
Clarification of core barrel decontamination	1	01/20/92
Plugging and Abandonment of Boreholes	1	08/30/91
Superseded by DCN 92.01	1	01/20/92
Surface casing classification	1	01/20/92
Monitoring Wells and Piezometer Installation	1	08/30/91
Superseded by DCN 92.01	1	01/20/92
Superseded by DCN 92.02	1	01/20/92
Superseded by DCN 91.06	1	11/08/91
Low Alluvial thickness wells	1	11/06/91
Superseded by DCN 91.08	1 .	11/15/91
	Change in criteria for cement grouting Grout procedure clarification Depth of casing emplacement Addition of Grout Ports Rotary Drilling and Rock Coring Superseded by DCN 92.02 Superseded by DCN 92.01 Superseded by DCN 91.04 Clarification of the use of super gel-x Clarification of measuring tape decontamination requirements Clarification of core barrel decontamination Plugging and Abandonment of Boreholes Superseded by DCN 92.01 Surface casing classification Monitoring Wells and Piezometer Installation Superseded by DCN 92.01 Superseded by DCN 92.02 Superseded by DCN 91.06 Low Alluvial thickness wells	Change in criteria for cement grouting Grout procedure clarification Depth of casing emplacement Addition of Grout Ports Rotary Drilling and Rock Coring Superseded by DCN 92.02 Superseded by DCN 92.01 Superseded by DCN 91.04 Clarification of the use of super gel-x Clarification of measuring tape decontamination requirements Clarification of core barrel decontamination Plugging and Abandonment of Boreholes Superseded by DCN 92.01 Surface casing classification Monitoring Wells and Piezometer Installation Superseded by DCN 92.02 Superseded by DCN 91.06 Low Alluvial thickness wells

Manual No.: Procedure No.: 5-21000-OPS-GT Table of Contents, Rev 14

Procedure No Page:

3 of 4 01/20/92

Effective Date: Organization:

Environmental Management

			·
Procedure No.	<u>Title</u>	Rev. <u>No.</u>	Effective <u>Date</u>
DCN 91.06	Change in filter pack guidance	1	11/08/91
DCN 91.07	Decontamination for site-wide geological chracterization	1	11/15/91
DCN 91.08	Figure replacement (GT.6-1)	1	11/15/91
DCN 91.09	Sampling with center bit drilling	1	12/03/91
DCN 92.01	Change in penetration depth into bedrock	1	01/20/92
DCN 92.02	Specification of auger size	1	01/20/92
GT.07 GT.08	Logging and Sampling of Test Pits and Trenches Surface Soil Sampling	1 1	08/30/91 08/30/91
DCN 91.01	Clarification supplementation of GT.08 - Surfaction Soil Sampling	e 1	11/26/91
DCN 92.01	Soil core sampling revision	1	01/02/92
GT.09	Soil Gas Sampling and Field Analysis	1 .	08/30/91
GT.10	Borehole Clearing	. 1	08/30/91
GT.11	Plugging and Abandonment of Wells	1	08/30/91
DCN 92.01	Clarification of handling of contaminated/ decontaminated surface pad materials	1	01/20/92
GT.15	Geophysical Borehole Logging	1	08/30/91
DCN 91.01	Superseded by DCN 92.01	1	01/20/92
DCN 92.01	Clarification of hole logging requirements	1 -	01/20/92
GT.17	Land Surveying	1	08/30/91
GT.18	Surface Geophysical Surveys	1	08/30/91
GT.19	Field Gas Chromatographs	1	08/30/91
•			

Manual No.: Procedure No.:

Page:

Effective Date:

5-21000-OPS-GT

Table of Contents, Rev 14

4 of 4

01/20/92

Organization: Environmental Management

Procedure <u>No.</u>	<u>Title</u>	Rev. <u>No.</u>	Effective <u>Date</u>
GT.20	Procedures for Soil Interstitial Water Sampling and Sampler Installation	. 1	08/30/91
GT.21	Cone Penetrometer Testing	0	12/19/91

Procedure Number 5-21000-OPS-GT,2, Rev. 1

Title Drilling a	and Sam	pling Using Ho	ollow-Stem A	Dat	e 0-2 8-9 1) 1-15-92	DCN Numb 5-21000-O	PS 67.2			
Expires _	titation	<u> </u>	17/92	Procedure Revi	sion Required	X Yes ☐ No				
Item Number	Page	Step or Paragraph		Changes (Use DCN CONTINUATION SHEET for Additional Space)						
1	9 of 14	5.3.1 paragraph 1	Add to end before same		ph: "Unconsolidat	ed core samples r	need nat be p	Deeled		
It is not po	essible to	peel uncons	olidated sami ne sampler al	oles. It is also any given time	not possible to sta	nding Items Above te that any part of Organization	an unconso	lidated sample		
11	24	QAPM	·x	1/20/92	a L Primos	User	×	1/1/02		
M.C.Bu	- 5-11	EOM		1/5/92	y ~ land	USER		1/15/42		
Approval	Respa	nsible Manag	er Date	7/42	Is Posting Read?	If Yes, By What		Date Posted		

Procedure Number 5-21000-OPS-GT.3 Rev. 1

Title Isolating	Bedrock	c from Alkıviui	n with G	routed	ina	Date (10-22-91) 1-15-92	DCN Numb 5-21000-0	PS- <i>GT3</i>			
Expires						sion Required			92.01		
_											
Scope Lin	nitation	none									
Item Number	Page	Step or Paragraph			(Use DC	N CONTINU	Changes ATION SHEET for Ad	Iditional Spac	e)		
1	6 of	5.3 paragraph 1	Surface with cer plug do	Replace the first sentence with: Surface casing will be installed by placing the casing into the borehole, filling the casing with cement and then forcing the cement from within the casing by pushing a rubber old down the casing thus displacing the cement out through cement ports at the pottern of the casing.							
2	8 of 9	5.3 part 2	Delete	this se	ection.				· .		
3	8 of 9	5.3 part 3	Renum	ber th	is to part 2.						
4	8 of 9	5.3 part 4	Renum	ber th	is to part 3.	insert "througi	the augers" at the	end of the first	sentence.		
5	8 01 9			Insert as part 4: Remove the augers and pump the cement mixture into the casing using a tremie pipe until undituted cement is present at the top of the casing.							
6	8 of 9	5.3 part 5	Remove the first part of the first sentence where it states: "Once the casing is at the bottom of the borehole.". Change "force it down to the bottom of the casing by using drill rods" to "force it down to the bottom of the casing by using drill rods or water pressure." Add to the end of the paragraph "Enough coment will be used to ensure that cament will rise to ground level when displaced from casing."								
Justification (Reason for Change - Provide Numbers To Reference Corresponding Items Above) Pumping grout down the hole after placing casing ensures that casing is at the bottom of the borehole, and minimizes borehole and casing problems.											
Сопсил	rence	Organizati	on	Req	Date	Concurren	ce Organizatio	n Req	Date		
11-0	May	QAPM		X	1120/92	at. Paris	ws. User	×	115/92		
M.C.L	messa	EON	1	×	1/15/02		YSER	×			
/ ur					1 /	1					
					<u></u>						
Approval	Approval of Responsible Manager Date Is Posting Rend? If Yes, By What Date? Date Posted										

Procedure	Numbe	5-21000-OP	S-GT.	4, Rev.	<u>1</u> .	***	·-·			Page 1 of 1
Title Rotary (Orilling as	nd Rock Carin	 g		14.114		Date (10	-28-91) 1-15 -9 2	DCN Numb 5-21000-0	pg_ GT:4 92,01
Expires Scope Lin	4-36	Sitewide Geol		Pro	o /72	sion Réquired		X Yes No		
item Number	Page	Step or Paragraph			(Use DC	CONTINUA		anges N SHEET for Add	itional Spac	æ)
1	8 of 10	6.0 paragraph 1	circul	eting me g runs.]	edium, no dec	contamination	of me	t When coring beasuring tapes is ontaminated after	necessary	between
						·		:		· -
The poten	itially con	ntaminated all	uvium I	has aires	ady been isol	ated from the	bedro	ding Items Above ock. In addition, ad borehole and t	the bor eh ak	
Concur	eans	Organization	DII	Req	Date	Concurren		Organization	Req	Date
Ste		QAPM		X	1/20/52	U L Prom	<u> </u>	User	<u> </u>	1/15/92
TH C. Fac	word	EOM		×	1/15/92			USER	 X	
Approvate	Respo	nsible Manage	per	Date/	1/2-	Is Posting Re	qq?	If Yes, By What -30-9		Date Posted

Procedure	Numbe	5-21000-OF	S-GT.4, Rev.	<u>1</u> .	: •			Page 1 of 1
Title Rotary (Orilling a	nd Rock Corin	-		,	Date (10-18-91) 1-15-92	DCN Num 5-21000-0	ps. GT. 4 92,02
Expires	4-18	1-92	Pn	ocadure Revi	sion Required	X Yes No		
Scope Lin	mation	Sitewide Geol	logic					
Item Number	Page	Step or Paragraph		(Use DC	ONTINUA	Changes ATION SHEET for Add	ditional Spac	æ)
Add the following to the end of the paragraph: "When coring bedrock using water as paragraph 1 circulating medium, no decontamination of core barrels is necessary between coring runs. The core barrels will be decontaminated after each boring is complete."								en coming
			·					:
			·			•		
							٠	
·								
						•		
-			·					
Justification	n (Reas	on for Change	- Provide Nu	nbers To Ref	terence Corres	ponding Items Above		
						bedrock. In addition, xposed borehole and		
						`		
Concurr	ence	Organizati	on Req	Date	Concurrence	organization	Req	Date
She	Du g	QAPM	X	1/20/94	a L. Prin	User	×	1/15/92
MCB	mbard	EOM	×	1/15/92				
Approval	d (200)	neible Manage	op Dote	<u> </u>	la Poetina Pa	qd? If Yes, By What	Dates	Date Posted
Approval of Responsible Manager		ar Date	lan	X Yes □				

Procedure Number 5-21000-OPS-GT.5, Rev 1

Title Plugging and Abandonment of Boreholes						ate (10/22/91) 1-15-92	DCN Numb 5-21000-0	PS- GT-5 93-01			
Expires t	<u> </u>	None None	118/902	Procedure Revis	sion Required	X Yes ☐ No					
item Number	Page	Step or Paragraph		Changes (Use DCN CONTINUATION SHEET for Additional Space)							
1	6 of 8	Parag.1. line 4		rsent the following sentence AFTERapproximately 3 feet. "If surface casing has been set in the borehole, see following paragraph."							
2 6 of Parag. 2 Change "A grouted surface casing" to "A						mented surface cas	ing",	t.			
	•	on for Change to better defin			erence Correspor	nding Items Above)					
Concur	rence	Organizat	ion Rec	Date	Concurrence	Organization	1 Req	Date			
fr	ug	OAPM	X	1/20/97	D.W. Langne	User	X	115/92			
MCA	Secret	(EOM	X	1/15/92							
Approval	Respo	педіе Маладе	or Date	11/92	Is Posting Required Name of Na		Date?	Date Posted			

Procedure Number	5-21000-OPS-GT.	S Rev 1

Title					3.	Date	DCN Numb				
Monitori	ng Wells	and Piezome	ter installation			(10-4-91) 1-15-92	5-21000-01	92.01 92.01			
Expires _	4-19	5-92	Pro	cedure Revis	sion Required	Yes No					
Scope Lin	nitation (топе			1. J. * i		· · · · · · · · · · · · · · · · · · ·				
					: 	HERE'S MALL OF					
item Number	Page	Step or Paragraph		Changes (Use DCN CONTINUATION SHEET for Additional Space)							
1	5 of 17	3	Substitute "ap	proximately o	one toot" for "a	pproximately 6 Inche	es or less"				
							ì	:			
								•			
	-										
	,					ļ		·			
						. •	·				
	<u> </u>	<u> </u>	<u> </u>			<u> </u>					
		-		mbers To Ref	lerence Corres	ponding Items Above)				
industry s	tandard i	is 1 foot into b	redrock.								
					•						
Сорошп	ence	/ Organizat	ion Req	Date	Concurrenc	e Organization	Req	Date			
Su	m	CAPM	×	1/20/92	a L Prim	user .	X	1/15/92			
MIB	fisce	EOM	×	1/15/92							
		-					_				
Approvat	of Fespo	nsible Manag	er Date/	7/92	is Posting Re	od? If Yes, By What No /-/5-4		Date Posted			

Procedure Number 5-21000-OPS-GT.6 Rev 1

Tale Monitori	na Welle	and Plezome	ter installation			Date (10-4-91) 1-15-9	1-0	N Numbe			
xpires \	ipon inec	orperation 4	15-92 Pr	ocedure Revis	ion Required	X Yes	No				
cobe riu	inauon ;	Silembe Cha	acterization P	rogram omy.							
Item Number	Page	Step or Paragraph		Changes (Use DCN CONTINUATION SHEET for Additional Space)							
1	for the sitewide geologic characterization program only, substitute bedrock to provide a pilot hole for a 2-foot deep sediment sump." for sized drive sampler will be driven 2 feet into the claystone bedrock to hole for a 2-foot deep sediment sump.".							r an app	LOCALISISIA		
				· ~ ·					:		
							·	<u>.</u>			
				umbers To Re		sponding Items A	bove)				
						•					
Concur	rence	Organiza	tion Req	Date	Concurrer	ice Organiz	ation	Req	Date		
Su	May	QAPN	X	120/92	a L.Pum	Use	at	X	1/15/92		
M.C.B.	WARK	EoM	×	1/15/00	1	i	ER	×	<u>'</u>		
Approval	of Resp	onsible Mana	ger Date	/n/en	Is Posting F	lead? If Yes, By	What Da	nte?	Date Post		

Procedure Number 5-21000-OPS-GT11, Rev. 1

Title					h	ate	DCN Numt	per PS- GT. II			
		andonment of				-15-92		92.01			
Expires	4-15-	97_	Pi	ocedure Revi	sion Required	X Yes □ N	•	~ ,			
Scope Lin	nitation !	none			Oberth		LUmtri				
							·				
item Number	Page	Step or Paragraph	Changes oh (Use DCN CONTINUATION SHEET for Additional Space)								
1	6 of 12	5.2	"Regardless pad removed will be monitor marked with the contaminal radiological cuncontaminated materials will Material that pending furth	of the method (if present) a pred for chem paint pens an lated areas use. The unders contamination ted materials will be monitored is not monitored per characterizated.	It the start of abautical and radiological and radiological then the pads with the pad with the pad with the pads will be deconned in and clean materined as clean will be trained. Drums with the pads will be th	section: I abandonment, a I abandonment operati cal contamination will be broken up cols such as sled if then be monitor ated areas will be rill be drummed an ithe field. After or rial will be drumm be stored in drum li be labeled as p rials Containers.	ions. Concret n, contaminate in such a way ge hammers, red for chemic e marked as at nd sent to the decontamination as on pallets at	e well pads d areas will be as to Isolete pick axes or al and pove. All landfill. All on, the the landfill. the site			
Justification	on (Reas	on for Change	e – Provide Nu	ımbers To Re	terence Correspo	onding Items Abo	ve) .	•			
The surface	ce pad m	ust be destro	yed and remo		o remove the cas	ing and install a r	new surface pa	ad as per SOP			
Сопсил	euce	Organizati	on Req	Date	Concurrence	Organizatio	on Req	Date			
Ste	MAK	QAPM	X	1/20/92	A L Pyros	L User	×	1/15/92			
MCS	norman	EOM	X	12/13/92	OHHer	- User	X	1/19/92			
				, , , , ,	D.M. L.	User	X	1/15/92			
Approval	Respo	sible Manag	er Date/	17/92	Is Posting Reck		nat Date?	Date Posted			

Procedure Number 5-21000-OPS-GT.15 Rev 1.

				/AIT			DOM NO.	4.0		
Title				Ø.	Date		DCN Numb 5-21000-08	er 25-67.15		
		ehole Logging				3-91) 1-15-92		92.01		
Expires 1	eni neqt	emeration 4	1-15-92 Pr	ocedure Revis	sion Required ??	∐ Yes ∐ No	ه الله الله الله	·IT		
Scapie Lim	itation	NONE	•	EGGs of the State of Heading						
000p0 4					CIVING MINI	F 10 10 10 12 15 15 15 15 15 15 15 15 15 15 15 15 15	F FAR	MT		
						is a steb on	जरर <i>्</i> ष्ट्र			
it em Number	Page	Step or Paragraph		Changes (Lige DCN CONTINUATION SHEET for Additional Space)						
1	4 of 5	2	Substitute "Every effort will be made to complete logging in one day." for "No hole will be left unlogged at the end of the day."							
:										
			·					<i>:</i>		
	-			,						
:					·					
						:				
				,						
Justification	on (Reas	on for Chang	e - Provide N	umbers To Re	ference Correspon	ding Items Abov	9)			
			ng should beg ed in one day.		at opportunity, eve	n if in the afterno	oon. Loggin <u>a</u>	should not		
Concun	rence	Organizat	ion Req	Date	Concurrence	Organization	n Req	Date		
Alex	AN	QAPM	X	1/20/52	a L Puma	User	×	115/92		
M.C.B	ouspe	FOM	×	1/15/92						
Approvate / //	ot Respo	nsible Manag	Date	7/92	Is Posting Read? Yes No	If Yes, By Wha		Date Posted		